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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

VITAL, PIERRE M

ART UNIT	PAPER NUMBER
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2186

DATE MAILED: 09/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PR4

Office Action Summary

Application No.
09/224,637

Applicant(s)
Cakeljic et al.

Examiner
Pierre Vital

Art Unit
2186



– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jul 30, 2002
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1035 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirements

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Jul 31, 1998 is/are a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 19, 24 6) ☐ Other:

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DETAILED ACTION

Response to Amendment

1. This Office Action is in response to applicant's communication filed July 30, 2002 in response to PTO Office Action mailed May 23, 2002. The applicant's remarks and amendment to the specification and/or the claims were considered with the results that follow.
2. Claims 1-25 have been presented for examination in this application. In response to the last Office Action, claims 1, 19, 21 and 22 have been amended. No claims have been canceled or added. Therefore, claims 1-25 are still pending in this application.
3. The objection of claims 19, 21 and 22 has been withdrawn due to the amendment filed July 30, 2002.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

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The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-4, 6-8, 10-12, 14 and 16-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Kullick et al. (US5,751,997).

As per claim 1, Kullick discloses a host domain including a host computer [Figure 1, element 18]; a storage domain, coupled to the host domain, the storage domain comprising: a plurality of primary storage devices [Figure 1, element 14]; a secondary storage device [Figure 1, element 16]; a switched network coupled to the plurality of primary storage devices and to the secondary storage device to permit one of the primary storage devices to access the secondary storage device through the switched network [Figure 1, element 12; column 4, lines 45-53].

As per claim 2, Kullick discloses a primary storage device coupled directly to a secondary storage device [column 3, lines 5-7].

As per claims 6 and 11, Kullick discloses a plurality of host computers [Figure 1, elements 18]; a plurality of primary storage devices to receive and store data in the devices [Figure 1, elements 14]; each primary storage device being associated with at least one of the host computers [column 3, lines 3-5]; a secondary storage device to receive and store data in the

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device coupled to a plurality of the primary storage devices [column 1, lines 32-34], the secondary storage device being configured to receive backup data from each of the host computers [column 3, lines 7-10].

As per claims 3 and 12, the use of cached disk array is well known in the state of the art.

As per claims 4 and 14, Kullick discloses a secondary storage device including a plurality of ports coupled to the network to send and receive data on the network in parallel [column 4, lines 54-63].

As per claims 7, 16 and 19, Kullick discloses transferring a first logical object from one of the primary storage devices directly to the second storage device directly over a first connection [column 3, lines 3-10].

As per claims 8, 17 and 20, Kullick discloses transferring a second logical object from one of the primary storage devices directly to the second storage device directly over a second connection [column 3, lines 14-24].

As per claims 10 and 18, the use of a tape library unit is well known in the state of the art.

As per claim 23, Kullick discloses automatically establishing a path through a network [column 3, lines 3-13; column 4, lines 45-49].

As per claim 24, the use of a tape library unit is well known in the state of the art.

Claim 21 is rejected as per claims 4 and 14.

Claim 22 is rejected as per claim 11.

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Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5, 15 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kullick et al. (US5,751,997).

As per claims 5, 15 and 25, Kullick fails to teach a secondary storage device comprising data movers as recited in the claims. Official Notice is taken that both the concept and the advantages of providing for storage devices which include data movers are well known and expected in the art.

It would have been obvious to one of ordinary skill in the art to have included the data movers in Kullick as these data movers are known to provide a means for communication between the backup devices and the network.

8. Claims 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kullick et al. (US5,751,997) and Kopper (US5,535,381).

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As per claims 9 and 13, Kullick discloses the claimed invention as detailed above in the previous paragraphs. However, Kullick does not specifically teach means for forming an abstract block set from a logical object stored in one of the primary storage devices as recited in the claims.

Kopper discloses means for forming an abstract block set from a logical object stored in one of the primary storage devices [col.2, line 54 - col. 3, line 54].

It would have been obvious to one of ordinary skill in the art, having the teaching of Kullick and before him at the time the invention was made to modify the system of Kullick to include a primary storage device coupled directly to a secondary storage device as taught by Kopper because it would have improved data management by mapping the file system into corresponding logical addresses on a logical disk as taught by Kopper.

Response to Arguments

9. Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

10. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach storage devices, switched network, tape library and cache disk array.


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre M. Vital whose telephone number is (703) 306-5839. The examiner can normally be reached on Monday to Friday 8:30 A.M. to 6:00 P.M., alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim, can be reached on (703) 305-3821. The fax phone numbers for the organization where this application or proceeding is assigned are: Official (703) 746-7239 and Non-Official (703) 746-7240.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9000.


Pierre M. Vital

August 27, 2002


MATTHEW KIM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100